ABSTRACT OF THE DISCLOSURE:

An ablative baffle for a liquid rocket engine thrust chamber that includes a hub member having a hollow structure, of which both top and bottom parts are open; a plurality of blade rib members, each of which is connected removably at one end to the outer surface of the hub member; and a blade-connecting member having a hollow structure, of which both top and bottom parts are open, to the inner part of which each of blade rib members is connected at the other end. An ablation cooling method is utilized which includes the composite heat resistant material structure with metal core, so that a liquid rocket engine system may be simplified, and the reliability of liquid rocket engine increases, and the manufacturing cost is cut down.